



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,995	01/28/2004	Yasuo Fukuda	CFA00046US	5020

34904 7590 12/16/2008  
CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION  
15975 ALTON PARKWAY  
IRVINE, CA 92618-3731

EXAMINER
----------

ABDI, AMARA

ART UNIT	PAPER NUMBER
----------	--------------

2624

MAIL DATE	DELIVERY MODE
-----------	---------------

12/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/766,995	<b>Applicant(s)</b> FUKUDA ET AL.	
	<b>Examiner</b> Amara Abdi	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,12 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) 2-11, 13-15, 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,12 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/28/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 21, 2008 has been entered.
2. Applicant's amendments after Final office action, filed October 21, 2008 has been entered and made of record.
3. Applicant's arguments with respect to claims 1, 12, 18 have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura (US 6,493,468) in view of Detachi (JP 2000-270222)

#### **(1) Regarding claims 1, 12, and 18:**

Matsuura discloses an image processing device (apparatus) and method (col. 1, line 65), and computer program (col. 13, lines 1-3), comprising:

inputting means (2 in Fig. 1) for inputting image (col. 4, lines 17-18);

histogram generating means (S11 in Fig. 4) for generating a histogram of the image (Fig. 5, col. 5, lines 10-11);

Calculating means (S2 in Fig. 3) for calculating a highlight point and a shadow point of an image from a histogram of the image (Fig. 4, col. 5, lines 5-7);

first generating means (13 in Fig. 16) for generating a gradation correction based on the highlight point, the shadow point, the target highlight point and the target shadow point (col. 9, lines 19-22, and col. 10, lines 49-51);

second generating means (S134 in Fig. 11) for generating an exposure based the representative luminance (col. 7, lines 5-9); and

correcting means (10 in Fig. 9) for correcting the input image based on the gradation correction (LUT1) and exposure correction (LUT2) (Fig. 14, col. 8, lines 15-41).

However, Matsuura does not teach explicitly the detecting of a face region in the input image; generating a second histogram of the detected face region; converting the second histogram based on the highlight point and the shadow point; and determining a representative luminance of the detected face region based on the converted second histogram of the detected face region.

Detachi, in analogous environment, teaches the detecting (extracting) of a face region in the input image (paragraph [0010], lines 3-4), generating a second histogram of the detected face region (paragraph [0010], lines 5-6), converting the second histogram based on the highlight point and the shadow point (paragraph [0010], lines 7-

Art Unit: 2624

8), and determining a representative luminance (predetermined gradation) of the detected face region based on the converted second histogram of the detected face region (paragraph [0011], lines 1-7).

It is desirable to make a proper gradation of a specific area in an image while utilizing an advantage of density histogram smoothing. The Detachi's approach, where detecting a face region in the input image and generating a histogram of the detected face region is to achieve this goal. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to apply the Detachi's teaching, where detecting a face region in the input image and generating a histogram of the detected face region, because such combination a proper gradation of a specific area in an image while utilizing an advantage of density histogram smoothing (Abstract, lines 1-3).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura and Detachi, as applied to claim 1 above, and further in view of Sato et al. (US 5,953,134).

The combination Matsuura and Detachi teach the parental claim 1. However, the combination Matsuura and Detachi, do not teach explicitly the rotating of the image in accordance with photographic information of the image.

Sato et al., in analogous environment, teaches rotating the image in accordance with the photographic information of the image (col. 10, lines 24-26).

It is desirable to have an excellent in the stability and reliability of the quality of an image formed as well as the efficiency of the delivery of a recording sheet after the image transfer. The Sato's approach, where rotating the image is to achieve this goal. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to apply the Sato's teaching, where rotating the image, with the combination Matsuura and Detachi, because such feature, has an excellent in the stability and reliability of the quality of an image formed as well as the efficiency of the delivery of a recording sheet after the image transfer (col. 4, lines 37-40).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura and Detachi, as applied to claim 1 above, and further in view of Tanaka et al. (US 5,760,831).

The combination Matsuura and Detachi teach the parental claim 1. However, the combination Matsuura and Detachi, do not teach explicitly the calculating of a gamma value based on the representative luminance and the target luminance.

Tanaka et al., in analogous environment, teaches the calculating of gamma value based on the representative luminance (R, G, and B) and the target luminance (luminance signal (col. 6, lines 66-67, and col. 7, line 1).

It is desirable to provide a white balance control which can collect data without reducing a frame. The Tanaka's approach, where calculating of gamma value based on the luminance R, G, B, and luminance signal is to achieve this goal. Therefore, it would

Art Unit: 2624

have been obvious to one having ordinary skill in the art at the time of the invention, to apply the Tanaka et al. teaching, where calculating of gamma value based on the luminance R, G, B, and luminance signal is to achieve this goal, with the combination Matsuura and Detachi, because such feature, provides a white balance control which can collect data without reducing a frame (col. 2, lines 10-12).

**Contact Information:**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571)270-1670. The examiner can normally be reached on Monday through Friday 8:00 Am to 4:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/

Supervisory Patent Examiner, Art Unit 2624

/Amara Abdi/

Examiner, Art Unit 2624